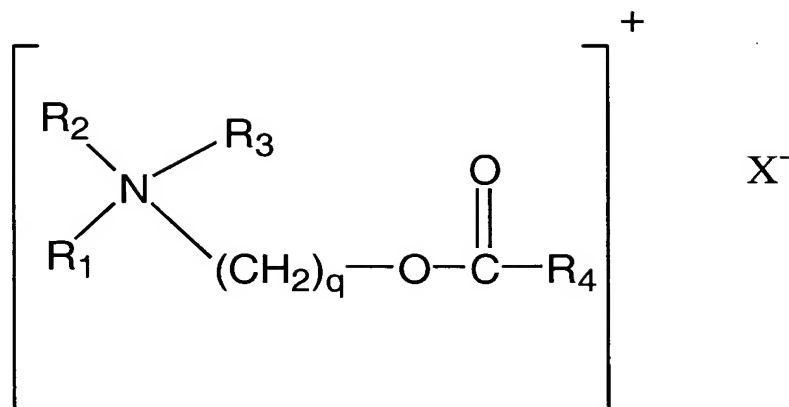


Claims

What is claimed is:

- 5
1. A fabric softener composition comprising:
- (a) from 0.01% to 50% by weight of a cationic or non-ionic softening compound;
- 10 (b) at least 0.001%, by weight, of a water dispersible cross-linked cationic polymer derived from the polymerization of from 5 to 100 mole percent of a cationic vinyl addition monomer, from 0 to 95 mole percent of acrylamide, and from 5 to 500 ppm of a difunctional vinyl addition monomer cross-linking agent;
- (c) from 0 to 5% by weight of a non-confined fragrance oil;
- 15 (d) an effective amount of at least one fabric or skin benefiting ingredient encapsulated within a first polymer material to form a polymer encapsulated benefiting ingredient, said encapsulated ingredient being further coated with a cationic polymer and;
- (e) balance water and optionally one or more adjuvant materials
- 20
2. A fabric softening composition in accordance with claim 1 wherein the cationic softening compound is selected from the group consisting of:
- (a) Difatty dialkly quaternary ammonium compounds;
- (b) Fatty ester quaternary ammonium compounds
- 25 (c) Alkyl imidazolinium compounds
- (d) Fatty amide quaternary ammonium compounds
3. A fabric softening composition in accordance with claim 1 wherein the non-ionic softening compound is selected from the group consisting of fatty amidoamine
- 30
4. A fabric softening composition in accordance with claim 2 wherein said fatty ester quaternary ammonium compound is a biodegradable fatty ester quaternary ammonium compound having the formula:
- 35

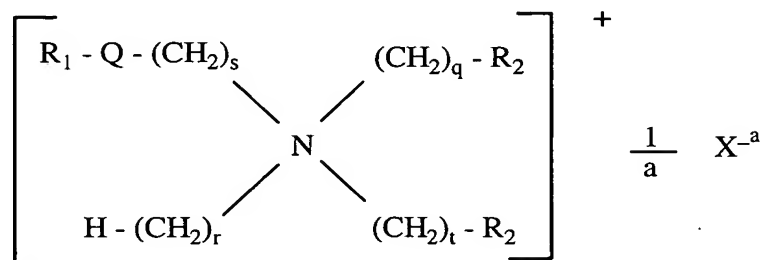


5 wherein R4 represents an aliphatic hydrocarbon group having from 8 to 22 carbon atoms, R₂ and R₃ represent (CH₂)_s-R₅ where R₅ represents an alkoxy carbonyl group containing from 8 to 22 carbon atoms, benzyl, phenyl, (C1-C4) – alkyl substituted phenyl, OH or H; R1 represents (CH₂)_t R₆ where R₆ represents benzyl, phenyl, (C1-C4) – alkyl substituted phenyl, OH or H; q, s, and t, each independently, represent an integer from 1 to 3; and X⁻ is a softener compatible anion.

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5. A fatty softening composition in accordance with claim 2 having a biodegradable fatty ester quaternary ammonium compound derived from the reaction of an alkanol amine and a fatty acid derivative followed by quaternization, said fatty ester quaternary ammonium compound being

15 represented by the formula :

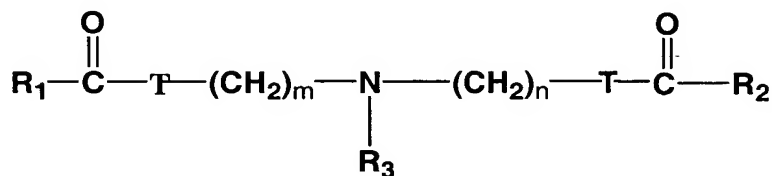


20 wherein Q represents a carboxyl group having the structure –OCO- or –COO-; R1 represents an aliphatic hydrocarbon group having from 8 to 22 carbon

atoms; R₂ represents -Q-R₁ or -OH; q, r, s and t, each independently represent a number of from 1 to 3; and X^{-a} is an anion of valence a; and wherein said fatty ester quaternary ammonium compound is comprised of a distribution of monoester, diester and triester compounds, the monoesterquat compound being formed when each R₂ is -OH; the diesterquat compound being formed when one R₂ is -OH and the other R₂ is -Q-R₁; and the triesterquat compound being formed when each R₂ is -Q-R₁; and wherein the normalized percentage of monoesterquat compound in said fatty ester quaternary ammonium compound is from 28% to 39%; the normalized percentage of diesterquat compound is from 52% to 62% and the normalized percentage of triesterquat compound is from 7% to 14%; all percentages being by weight.

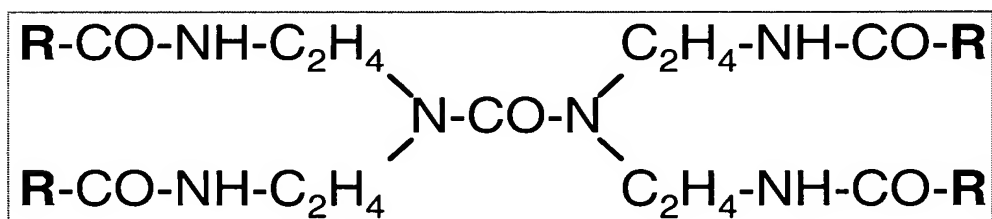
6. A fabric softening composition in accordance with claim 3 wherein said fatty amidoamine has the formula (I or II):

Formula I



wherein R₁ and R₂, independently, represent C₁₂ to C₃₀ aliphatic hydrocarbon groups, R₃ represents (CH₂CH₂O)_pH, CH₃ or H; T represents NH; n is an integer from 1 to 5; m is an integer from 1 to 5 and p is an integer from 1 to 10.

Formula II (Alkyl Carbamidoethyl Urea; R is a C₁₂ to C₂₂ Alkyl Group)

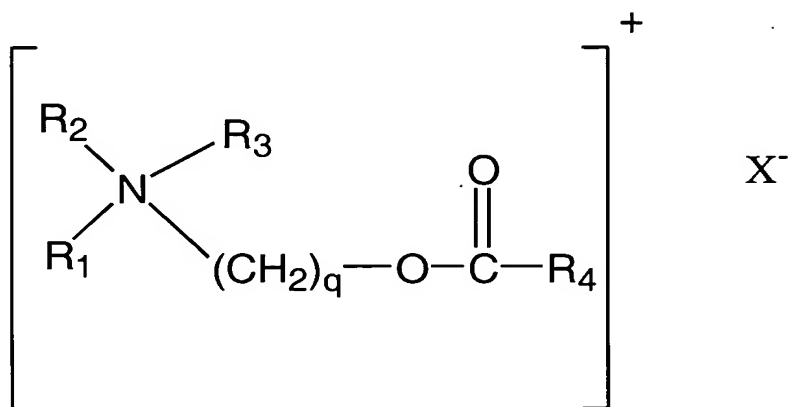


7. A fabric softening composition in accordance with claim 1 wherein said cross-linked cationic polymer is a cross-linked copolymer of a quaternary

ammonium acrylate or methacrylate in combination with an acrylamide comonomer.

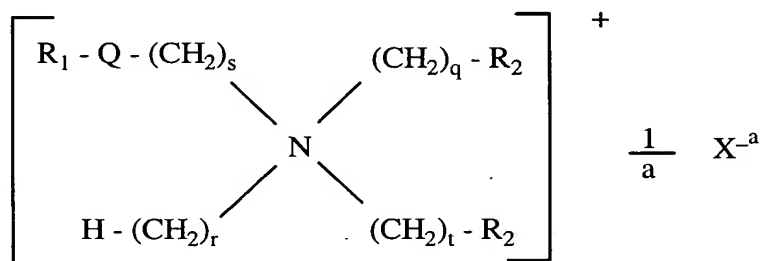
- 5 8. A fabric softening composition in accordance with claim 1 wherein said encapsulating polymer in (d) is selected from the group consisting of a vinyl polymer; an acrylate polymer, melamine formaldehyde polymer, urea formaldehyde polymer and mixtures thereof.
- 10 9. A fabric softening composition in accordance with claim 1 wherein said cationic polymer is a cationic polyamine or selected from polysaccharides, cationically modified starch, cationically modified guar, polysiloxanes, polydiallyl dimethyl ammonium halides, copolymers of polydiallyl dimethyl ammonium chloride, imidazolinium halides.
- 15 10. A fabric softening composition in accordance with claim 9 wherein said polyamine in (d) is a reaction product of a polyamine and an oxirane material.
- 20 11. The composition of claim 10 wherein the oxirane material is selected from the group consisting of (chloromethyl) oxirane, (bromoethyl) oxirane and mixtures thereof.
- 25 12. The composition of claim 1 wherein the fabric or skin beneficiating ingredient is selected from the group consisting of perfumes or fragrance oils, antibacterial agents, vitamins, skin conditioners, UV absorbers and enzymes.
- 30 13. The composition of claim 12 wherein the fabric or skin beneficiating ingredient is a perfume or fragrance oil.
14. The composition of claim 12 wherein the perfume or skin beneficiating ingredient is mixed with a polymer or non-polymeric carrier material or surfactant or solvent or mixtures thereof.
15. A fabric softening composition in accordance with claim 1 which is in the form of a liquid, powder or gel.

16. A fabric softening composition in accordance with claim 1 which is in the form of a fabric softener sheet.
17. A fabric softening composition in accordance with claim 1 which further contains at least 0.001% of a chelating compound capable of chelating metal ions and selected from the group consisting of amino carboxylic acid compounds, organo aminophosphonic acid compounds and mixtures thereof.
18. A method of imparting softness to fabrics comprising contacting said fabrics with an effective amount of the fabric softening composition of claim 1.
19. The method of claim 18 wherein said fabrics are contacted during the rinse cycle of a laundry washing machine or hand wash laundry treatment. The fabrics can be contacted also by a method of direct spraying or padding onto fabrics.
20. A method in accordance with claim 18 wherein said fabric softening compound is a fatty ester quaternary ammonium compound.
21. A method in accordance with claim 20 wherein said fatty ester quaternary ammonium compound has the formula



wherein R4 represents an aliphatic hydrocarbon group having from 8 to 22 carbon atoms, R₂ and R₃ represent (CH₂)_s-R₅ where R₅ represents an alkoxy carbonyl group containing from 8 to 22 carbon atoms, benzyl, phenyl, (C1-C4) – alkyl substituted phenyl, OH or H; R1 represents (CH₂)_t R₆ where R₆ represents benzyl, phenyl, (C1-C4) – alkyl substituted phenyl, OH or H; q, s, and t, each independently, represent an integer from 1 to 3; and X⁻ is a softener compatible anion.

22. A method in accordance with claim 19 wherein the fatty ester quaternary ammonium compound is derived from the reaction of an alkanol amine and a fatty acid derivative followed by quaternization, said fatty ester quaternary ammonium compound being represented by the formula :



wherein Q represents a carboxyl group having the structure –OCO- or –COO-; R1 represents an aliphatic hydrocarbon group having from 8 to 22 carbon atoms; R2 represents –Q-R1 or –OH; q, r, s and t, each independently represent a number of from 1 to 3; and X^{-a} is an anion of valence a; and wherein said fatty ester quaternary ammonium compound is comprised of a distribution of monoester, diester and triester compounds, the monoesterquat compound being formed when each R₂ is –OH; the diesterquat compound being formed when one R₂ is –OH and the other R₂ is –Q-R1; and the triesterquat compound being formed when each R₂ is –Q-R1; and wherein the normalized percentage of monoesterquat compound in said fatty ester quaternary ammonium compound is from 28% to 39%; the normalized percentage of diesterquat compound is from 52% to 62% and the normalized

percentage of triesterquat compound is from 7% to 14%; all percentages being by weight.

- 5 23. A method in accordance with claim 18 wherein said fabric or skin
 beneficiating ingredient is a perfume or fragrance oil.
24. A method in accordance with claim 23 wherein said encapsulating polymer for
 said perfume or fragrance oil is selected from the group consisting of a vinyl
10 polymer; an acrylate polymer, melamine formaldehyde polymer, urea
 formaldehyde polymer and mixtures thereof.